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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,237	08/18/2003	Christof Kass	2726	3293

7590 12/02/2005  
STRIKER, STRIKER & STENBY  
103 East Neek Road  
Huntington, NY 11743

EXAMINER
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BOLDEN, ELIZABETH A

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/643,237

Applicant(s)

KASS ET AL.

Examiner

Elizabeth A. Bolden

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1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 20 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☒ Claim(s) 1-14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/18/03</u> . | 6) <input type="checkbox"/> Other: _____  |

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## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 18 August 2003 has been considered by the examiner.

### ***Claim Objections***

The claims recite an aluminum-free borosilicate glass. In the specification, it discusses that the glass is free of  $\text{Al}_2\text{O}_3$ . It is ambiguous to the Examiner whether the limitation of aluminum-free in the claims is meant to mean that the glass is free of alumina (aluminum oxide/ $\text{Al}_2\text{O}_3$ ). For example a borosilicate glass containing aluminum oxide, which does not comprise aluminum metal would be prior art on the claims as currently recited. Additionally, a borosilicate glass that contains aluminum oxide and aluminum metal in the glass composition, which would be excluded from the prior art as the claims are currently written due to the presence of the aluminum metal. The Examiner has reviewed this case in light of the specification meaning that the Aluminum-free recitation means free of  $\text{Al}_2\text{O}_3$ , however the claims should be amended to recite the actual limitation in view of the original specification.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baak et al., US Patent 3,499,776.

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Baak et al. teach an alkali metal borosilicate glass containing  $ZrO_2$  composition having overlapping components with instant claims 1-13. See Abstract and column 3, lines 50-69. Baak et al. teach that the borosilicate glass has overlapping ranges of thermal expansion coefficient and working temperature as recited in instant claim 14. See column 3, lines 38-41, column 6, lines 12-35, and column 7, lines 59-65.

Baak et al. fail to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional and property limitations of claims 1-14. Furthermore Baak et al. teach the glass composition in terms of mole percent. It is believed that if the compositional ranges of Baak et al. were converted from mole % ranges to weight % ranges the compositional ranges would overlap. See theoretical compositions below. However, overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

Example		SiO <sub>2</sub>	B <sub>2</sub> O <sub>3</sub>	Na <sub>2</sub> O	K <sub>2</sub> O	ZrO <sub>2</sub>
A	Mol%	81	12		5	2
	Wt%	76	13		7.3	3.8
B	Mol%	78	10	1.0	5.0	6.0
	Wt%	70.5	10.5	0.9	7.1	11

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mennemann et al., US Patent 4,562,161.

Mennemann et al. teach a glass composition having overlapping ranges of components with instant claims 1-13. See Abstract and column 2, lines 27-45.

Mennemann et al. fail to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional and property limitations of claims 1-14. However, overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05

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Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the properties recited in claim 14.

Claims 1 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smalley et al., US Patent 3,574,666.

Smalley et al. teach a glass composition having overlapping ranges of components with instant claims 1 and 9-13. See column 2, lines 1-11.

Smalley et al. fail to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional and property limitations of claims 1 and 9-14. However, overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the reference because overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the properties recited in claim 14.

Claims 1 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamashita et al., US Patent 3,998,647.

Yamashita et al. teach a glass composition having overlapping ranges of components with instant claims 1 and 9-13. See Abstract and column 2, lines 26-36.

Yamashita et al. fail to teach any examples or compositional ranges that are sufficiently specific to anticipate the compositional and property limitations of claims 1 and 9-14. However, overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05

Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges disclosed by the

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reference because overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

One of ordinary skill in the art would expect that a glass with overlapping compositional ranges would have the properties recited in claim 14.

***Conclusion***

The additional references cited on the 892 have been cited as art of interest since they are considered to be cumulative to or less than the art relied upon in the rejections above.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 571-272-1363. The examiner can normally be reached on 9:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo can be reached on 571-272-1233. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EAB

28 November 2005

  
**KARL GROUP**  
**PRIMARY EXAMINER**  
**GROUP 1755**